

S.No. 5239

RCCSCS 7

(For candidates admitted from 2008-2009 onwards)

B.Sc. DEGREE EXAMINATION, APRIL 2022.

Part III — Computer Science – Major

MICROPROCESSOR AND ITS APPLICATIONS

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20)

Answer ALL questions.

1. What do you mean by Associative Memory?
2. Define Operand.
3. What do you mean by subroutines?
4. Define Status Flags.
5. What do you mean by Multibyte?
6. Define Data Array.
7. What do you mean by Interrupt?
8. What do you mean by I/O Ports?

9. Mention the types of LED display method.
10. Mention any two device that is used for Temperature measurement and control.

PART B — ($5 \times 5 = 25$)

Answer ALL questions, choosing either (a) or (b).

11. (a) What do you mean by Bus. Explain in detail about Memory addressing Capability of a CPU?

Or

- (b) Explain briefly about Accumulator and Stack Pointer.

12. (a) Write short notes on :

- (i) Direct Addressing Modes
- (ii) Immediate addressing Modes.

Or

- (b) Write note on Register Addressing and Register in-direct Addressing.

13. (a) Write a program to Subtract two decimal numbers.

Or

- (b) Write a program to do Two's Complement of 8-bit value.

14. (a) Explain in detail Digital to Analog Conversion with example.

Or

- (b) Explain in detail about I/O Interfacing.

15. (a) Explain in detail about Microprocessor based Traffic Control.

Or

- (b) Discuss in detail about Delay Program using One Register.

PART C — ($3 \times 10 = 30$)

Answer any THREE questions.

16. Explain in detail about Instruction Cycle.
17. Discuss in detail about Logical group in 8085 instructions set.
18. Write a Program to arrange the data array in ascending order.
19. Explain in detail about Interrupts of Intel 8085.
20. Explain in detail how microprocessor based water level indicator is developed.